

The Claims

1. (Previously Presented) A method comprising:
selecting a distributed application;
retrieving a policy associated with the distributed application;
dynamically selecting one of a plurality of nodes;
resetting a boot image of the selected node based at least in part on the retrieved policy, the boot image being compatible with the distributed application;
associating a virtual disk image with the selected node based at least in part on the retrieved policy; and
executing at least a portion of the distributed application on the selected node, as reset, using the virtual disk image associated with the selected node, the execution performed by at least one processor of the selected node.

2. (Previously Presented) The method of Claim 1, wherein:
the distributed application is operable to execute at a subset of the plurality of nodes;
and
the method further comprises:
comparing the subset of nodes with the retrieved policy; and
selecting one of a plurality of compatible boot images based on the comparison.

3. (Original) The method of Claim 2, wherein comparing the subset of nodes with the retrieved policy comprises:
determining a count of nodes in the subset; and
selecting the boot image based on a link in the policy and the count of nodes.

4. (Previously Presented) The method of Claim 2, wherein each node in the subset corresponds to one of the plurality of compatible boot images.

5. (Previously Presented) The method of Claim 1, wherein dynamically selecting one of the plurality of nodes comprises:

determining if one or more of the plurality of nodes is unutilized by another distributed application; and

in response to at least one of the nodes being unutilized, selecting one of the unutilized nodes.

6. (Previously Presented) The method of Claim 5, further comprising, in response to none of the nodes being unutilized, selecting one of the nodes utilized by the other distributed application based on one or more of the following:

the retrieved policy;

low utilization of the selected node;

priority of the selected distributed application; or

compatibility of the selected node with the selected distributed application.

7. (Original) The method of Claim 6, wherein resetting the boot image of the selected node comprises:

automatically shutting down the selected node;

resetting the boot image of the selected node; and

restarting the selected node using the reset boot image.

8. (Previously Presented) The method of Claim 7, further comprising terminating any processes associated with the second distributed application prior to shutting down the selected node.

9. (Previously Presented) The method of Claim 1, wherein the policy comprises a plurality of links to boot images, each link corresponding to one of a count of nodes compatible with the distributed application.

10. (Previously Presented) The method of Claim 1, wherein the policy comprises one or more parameters for determining timing of the selection of the node.

11. (Previously Presented) The method of Claim 1, wherein the boot image comprises a remote boot image stored in a Storage Area Network (SAN).

12. (Previously Presented) The method of Claim 1, wherein the selected node corresponds to a first boot image prior to the reset and a second boot image from the reset, the first and second boot images differing from each other with respect to one or more of the following characteristics:

operating system;
system configuration; or
distributed application parameters.

13. (Previously Presented) The method of Claim 1, wherein:
the method further comprises determining that one of the plurality of nodes has failed, the failed node having executed at least a portion of the selected distributed application; and
selecting one of the plurality of nodes comprises selecting one of the remaining nodes in response to the failure.

14. (Previously Presented) The method of Claim 1, wherein each of the plurality of nodes comprises a same processor architecture.

15. (Original) The method of Claim 1, wherein selecting one of the plurality of nodes comprises selecting one of the plurality of nodes at a predetermined time.

16. (Previously Presented) One or more computer readable media embodying software that, when executed by a processor, operates to:

- select a distributed application;
- retrieve a policy associated with the distributed application;
- dynamically select one of a plurality of nodes;
- reset a boot image of the selected node based at least in part on the retrieved policy, the boot image being compatible with the distributed application;
- associate a virtual disk image with the selected node based at least in part on the retrieved policy; and
- execute at least a portion of the distributed application on the selected node, as reset, using the virtual disk image associated with the selected node.

17. (Previously Presented) The computer readable media of Claim 16, wherein the software is further operable, when a subset of the plurality of nodes is executing the distributed application, to:

- compare the subset of nodes with the retrieved policy; and
- select one of a plurality of compatible boot images based on the comparison.

18. (Previously Presented) The computer readable media of Claim 17, wherein, to compare the subset of nodes with the retrieved policy, the software is operable to:

- determine a count of nodes in the subset; and
- select the boot image based on a link in the policy and the count of nodes.

19. (Previously Presented) The computer readable media of Claim 17, wherein each node in the subset corresponds to one of the plurality of compatible boot images.

20. (Previously Presented) The computer readable media of Claim 16, wherein, to dynamically select one of the plurality of nodes, the software is operable to:

- determine if one or more of the plurality of nodes is unutilized by another distributed application; and
- in response to at least one of the nodes being unutilized, select one of the unutilized nodes.

21. (Previously Presented) The computer readable media of Claim 20, wherein, in response to none of the nodes being unutilized, the software is further operable to select one of the nodes utilized by the second distributed application based on one or more of the following:

- the retrieved policy;
- low utilization of the selected node;
- priority of the selected distributed application; or
- compatibility of the selected node with the selected distributed application.

22. (Previously Presented) The computer readable media of Claim 21, wherein, to reset the boot image of the selected node, the software is operable to:

- automatically shut down the selected node;
- reset the boot image of the selected node; and
- restart the selected node using the reset boot image.

23. (Previously Presented) The computer readable media of Claim 22, wherein the software is further operable to terminate any processes associated with the other distributed application prior to shutting down the selected node.

24. (Previously Presented) The computer readable media of Claim 16, wherein the policy comprises a plurality of links to boot images, each link corresponding to one of a count of nodes compatible with the distributed application.

25. (Previously Presented) The computer readable media of Claim 16, wherein the policy comprises one or more parameters for determining timing of the selection of the node.

26. (Previously Presented) The computer readable media of Claim 16, wherein the boot image comprises a remote boot image stored in a Storage Area Network (SAN).

27. (Previously Presented) The computer readable media of Claim 16, wherein the selected node corresponds to a first boot image prior to the reset and a second boot image

from the reset, the first and second boot image differing from each other with respect to one or more of the following characteristics:

operating system;
system configuration; or
distributed application parameters.

28. (Previously Presented) The computer readable media of Claim 16, wherein:
the software is further operable to determine that one of the plurality of nodes has failed, the failed node having executed at least a portion of the selected distributed application; and

to select one of the plurality of nodes, the software is operable to select one of the remaining nodes in response to the failure.

29. (Previously Presented) The computer readable media of Claim 16, wherein each of the plurality of nodes comprising a same processor architecture.

30. (Previously Presented) The computer readable media of Claim 16, wherein, to select one of the plurality of nodes, the software is operable to select one of the plurality of nodes at a predetermined time.

31. (Previously Presented) A system comprising:
a plurality of nodes, each node comprising at least one processor; and
a management node communicably coupled to the plurality of nodes, the management
node operable to:

- select a distributed application;
- retrieve a policy associated with the distributed application;
- dynamically select one of a plurality of nodes;
- reset a boot image of the selected node based at least in part on the retrieved
policy, the boot image being compatible with the distributed application;
- associate a virtual disk image with the selected node based at least in part on
the retrieved policy; and
- execute at least a portion of the distributed application on the selected node, as
reset, using the virtual disk image associated with the selected node.

32. (Previously Presented) The system of Claim 31, wherein:
the distributed application is operable to execute at a subset of the plurality of nodes;
and

the management node is further operable to:
compare the subset of nodes with the retrieved policy; and
select one of a plurality of compatible boot images based on the comparison.

33. (Previously Presented) The system of Claim 32, wherein, to compare the
subset of nodes with the retrieved policy, the management node is operable to:
determine a count of nodes in the subset; and
select the boot image based on a link in the policy and the count of nodes.

34. (Previously Presented) The system of Claim 32, wherein each node in the
subset corresponds to one of the plurality of compatible boot images.

35. (Previously Presented) The system of Claim 31, wherein, to dynamically select one of the plurality of nodes, the management node is operable to:

determine if one or more of the plurality of nodes is unutilized by another distributed application; and

in response to at least one of the nodes being unutilized, select one of the unutilized nodes.

36. (Previously Presented) The system of Claim 35, wherein, in response to none of the nodes being unutilized, the management node is operable to select one of the nodes utilized by the other distributed application based on one or more of the following:

the retrieved policy;

low utilization of the selected node;

priority of the selected distributed application; or

compatibility of the selected node with the selected distributed application.

37. (Previously Presented) The system of Claim 36, wherein, to reset the boot image of the selected node, the management node is operable to:

automatically shut down the selected node;

reset the boot image of the selected node; and

restart the selected node using the reset boot image.

38. (Previously Presented) The system of Claim 37, wherein the management node is further operable to terminate any processes associated with the second distributed application prior to shutting down the node.

39. (Previously Presented) The system of Claim 31, wherein the policy comprises a plurality of links to boot images, each link corresponding to one of a count of nodes compatible with the distributed application.

40. (Previously Presented) The system of Claim 31, wherein the policy comprises one or more parameters for determining timing of the selection of the node.

41. (Previously Presented) The system of Claim 31, wherein the boot image comprises a remote boot image stored in a Storage Area Network (SAN).

42. (Previously Presented) The system of Claim 31, wherein the selected node corresponds to a first boot image prior to the reset and a second boot image from the reset, the first and second boot images differing from each other with respect to one or more of the following characteristics:

operating system;
system configuration; or
distributed application parameters.

43. (Previously Presented) The system of Claim 31, wherein:
the management node is further operable to determine that one of the plurality of nodes has failed, the failed node having executing at least a portion of the selected distributed application; and

to select one of the plurality of nodes, the management node is operable to select one of the remaining nodes in response to the failure.

44. (Previously Presented) The system of Claim 31, wherein each of the plurality of nodes comprises a same processor architecture.

45. (Previously Presented) The system of Claim 31, wherein, to select one of the plurality of nodes, the management node is operable to select one of the plurality of nodes at a predetermined time.